



## Distributional effects of climate change taxation: The case of the UK

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### Abstract:

Current economic instruments aimed at climate change mitigation focus mainly on CO(2) emissions, but efficient climate mitigation needs to focus on other greenhouse gases as well as CO(2). This study investigates the distributional effects of climate change taxes on households belonging to different income and lifestyle groups; and it compares the effects of a CO(2) tax with a multiple GHG tax in the UK in terms of cost efficiency and distributional effects. Results show that a multi GHG tax is more efficient than a CO(2) tax due to lower marginal abatement costs, and that both taxes are regressive, with lower income households paying a relatively larger share of their income for the taxes than higher income households. A shift from a CO(2) tax to a GHG tax will reduce and shift the tax burden between consumption categories such as from energy-intensive products to food products. Consumers have different abilities to respond to the tax and change their behavior due to their own socio-economic attributes as well as the physical environment such as the age of the housing stock, location, and the availability of infrastructure. The housing-related carbon emissions are the largest component of the CO(2) tax payments for low income groups and arguments could be made for compensation of income losses and reduction of fuel poverty through further government intervention.

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### Resource Description

#### Exposure :

weather or climate related pathway by which climate change affects health

Unspecified Exposure

#### Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

#### Geographic Location:

resource focuses on specific location

Non-United States

**Non-United States:** Europe

# Climate Change and Human Health Literature Portal

**European Region/Country:** European Country

**Other European Country :** United Kingdom

**Health Impact:** 

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

**Intervention:** 

strategy to prepare for or reduce the impact of climate change on health

A focus of content

**Mitigation/Adaptation:** 

mitigation or adaptation strategy is a focus of resource

Mitigation

**Population of Concern:** A focus of content

**Population of Concern:** 

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status

**Resource Type:** 

format or standard characteristic of resource

Research Article

**Timescale:** 

time period studied

Time Scale Unspecified